

A challenging case

A series of difficult cases in pelvic floor diseases are presented with an educational purpose following the teaching module of the Integral Theory. The proposer describes symptoms, clinical findings and management plan. Opinions and suggestions of a number of Colleagues are reported. In the next two issues of Pelviperineology, together with new “challenging cases”, results and further comments on this case will be published at three and six months follow up.

The case. A 67 year old female with a history of urinary retention and prolapse was complaining hesitancy in micturition and severe dysuria. Appendectomy at 36yrs, and 4 month before hysteroscopic removal of endometrial polyps. Difficulty in voiding urine since one year. *Urogynaecological examination:* 4th degree cystocele (HWS), 2th degree hysterocele and rectocele; POP-Q: Aa:+3; Ba:+6; C:+1; Gh:4; pb: 1.5; Tvl: 8; Ap:0;Bp:+1; D: -1. PC test:1. Q tip test:2. Stress test and Bonney test: negative. At bimanual examination uterus was of regular size, behind and on the left of the womb a 10 cm mass was observed, regular the right ovary, the left was impalpable. *Ultrasounds* confirmed a 10 cm solid mass between left ovary and lateral margin of uterus compatible as first hypothesis with fibroid belonging either to the uterus or to the left ovary (Fig. 1). Bilateral mild hydronephrosis, decreased after emptying by catheter, was detected. A *CT scan* confirmed the diagnosis without giving the certainty of belonging. *Urodynamic* testing showed: large bladder capacity (700 ml), normal bladder compliance, no urodynamic SUI, no detrusor overactivity. Uroflowmetry revealed a urinary strongly remitting curve with kinking effect, and 300 ml post-void residual urine was detected. At cystoscopy the bladder mucosa was regular except for moderate trabeculation. The patient was planned for surgery.

Main issues to face: 1 vaginal, laparoscopic or abdominal route? 2 prophylactic incontinence procedure: yes or no? 3 any specific procedures for each compartment? 4 intraoperative histological examination should be performed?

VITO LEANZA Dept. Gynecology, University of Catania, Italy vito.leanza@gmail.com

Comment. I thank Professor Leanza for a most interesting case. I commend the use of the Pictorial Diagnostic Algorithm (Fig. 2). It ensures that all relevant pelvic symptoms are searched for, it vastly simplifies diagnosis and it acts as an excellent guide for surgery. His figure summarizing the prolapse is also excellent.

Diagnosis. A history of urinary stress incontinence (USI), but no evidence of USI on testing suggests that this woman has latent stress incontinence. The urinary retention and hesitancy indicate cardinal (CL)/uterosacral (USL) laxity. The mass is a concern.

The first task is to assess what the mass is all about. A diagnostic laparoscopy with or without biopsy is the first task to ensure it is not malignant. If, as appears, it is obstructing the ureter, it needs to be removed.

Management. Most likely she will need a midurethral sling at some stage, but this should be delayed until after the other surgery so a more adequate assessment can be made of her USI. The uterus is normal in size, so there is no need to remove it. This is an important consideration as a hysterectomy would most likely worsen the posterior zone symptoms which are summarized in the algorithm. CL and USL repair would cure most of the prolapse problems. Dislocation of CL and anterior vaginal wall from their attachments to the anterior cervical ring in my experience account for 80% of all cystoceles (Fig. 3). Surgical cure for POP is best performed vaginally, ideally using a Tissue Fixation System (TFS) CL and USL tape (Fig. 4)¹. CL/USL reconstruction will also improve the urinary hesitancy residual urine. The anatomical basis for this was detailed in a 2015 publication². This publication details the anatomical and physiological factors behind the hesitancy and residual urine reported by Professor Leanza. Alternative to TFS, the PIVS technique as detailed by Shkapura³ or Wagenlehner⁴ would give equivalent results. The laparoscopic route in my opinion is far too imprecise and it would not address the ligament defects causing the prolapse problems.

REFERENCES

1. Sekiguchi Y et al. Reinforcement of suspensory ligaments under local anesthesia cures pelvic organ prolapse: 12-month results (n=60) IJG 2014; 25: 783-789
2. Petros P, Lynch W, Bush M. Surgical repair of uterosacral/cardinal ligaments in the older female using the tissue Fixation system improves symptoms of obstructed micturition and residual urine Pelviperineology 2015; 34: 112-116
3. Shkarupa D et al. The hybrid technique of pelvic organ prolapse treatment: apical sling and subfascial colporrhaphy, IJG DOI 10.1007/s00192-017-3286-7 (n=148)
4. Wagenlehner F et al. Vaginal apical prolapse repair using two different sling techniques improves chronic pelvic pain, urgency and nocturia—a multicentre study of 1420 patients Pelviperineology 2016; 35: 99-104 (n=1420)

PETER E. PETROS University of NSW, St Vincent's Hospital, Sydney, Australia
pp@kvinno.com

Comment. Patient symptoms. Urge incontinence, nocturia x6-7 per night, bladder emptying problems, stress incontinence.

Examination. 4th degree cystocele (HWS), 2th degree hysterocele and rectocele

The first concern is to deal with the mass and the bilateral mild hydronephrosis. I suggest:

1. Put in ureteral stents on both sides to protect kidneys and ureters
2. Take out unclear mass on left side by open incision. Once this is dealt with, I would address her prolapses (cystocele and rectocele) taking care not to excise vagina, as this will only decrease the collagen and elastin needed for proper function. With regard to her symptoms, based on the al-

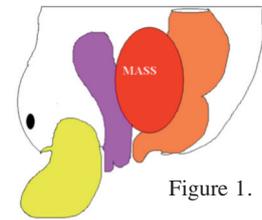


Figure 1.

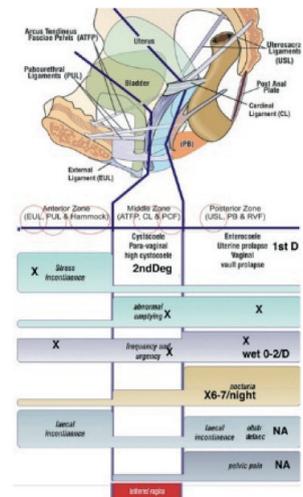


Figure 2.

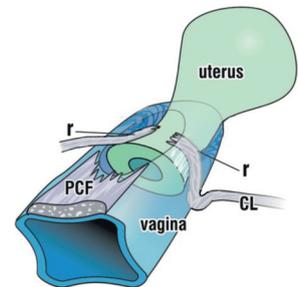


Figure 3. – Pathogenesis of “high cystocele” (transverse defect). Dislocation of cardinal ligament (CL) and the pubocervical fascial layer of the anterior vaginal wall (PCF) from their attachments to the anterior cervical ring allow PCF to rotate down as a cystocele.

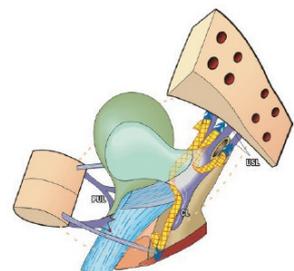


Figure 4. – Cardinal (CL) and uterosacral (USL) ligaments are shortened and reinforced by a 7mm TFS tape placed along their length.



Figure 5. – See video on-line https://youtu.be/uBJOB_FiKbY

gorithm (which I have found to be very accurate) she would need a midurethral sling for her stress urinary incontinence and reinforcement of the cardinal and uterosacral ligaments for all the other symptoms.

3. The prolapse should be preferably corrected via the vaginal route. Alternatively, simultaneously perform open sacrocolpopexy by taking out the mass, though sacrocolpopexy by itself is unlikely to be sufficient to cure the cystocele and rectocele.

4. As a general rule, those of us who follow the Integral Theory try and preserve the uterus. So don't remove it if it can be avoided.

5. It seems that the stress urinary incontinence is latent. Don't correct it - wait for the results of prolapse surgery and do possible USI surgery at the earliest 3 months later (residuals!)

Diagnosis of latent stress incontinence. I attach a video (www.pelviperineology.org - https://youtu.be/uBJOB_FiKbY) (Fig. 5) which shows a test for latent stress incontinence. Reduction of the cystocele can induce stress incontinence on coughing.

ALFONS GUNNEMANN MD *Chefartz Klinikum Lippe, Detmold, Germany*
alfons.gunnemann@klinikum-lippe.de

Letter to the Editor

Dear Editor,

I congratulate Pelviperineology on its initiative in seeking new directions for diagnosis and management of chronic pelvic pain as published in the September 2017 issue¹⁻⁴.

I present below a recent experience where these concepts were directly tested for truth or falsity.

Today Jan. 25th 2018, I reviewed a patient with Ehlers Danlos disease who had been complaining of strong pelvic pain since many years. The speculum test⁵ reduced the pain significantly but the tampon in the posterior fornix suppressed pain and the need to urinate. It was an amazing experience for both doctor and patient as it indicated the problem was potentially curable. After lidocaine injection into the utero-sacral ligament, the pain significantly reduced but only for 30 minutes, exactly as described by Zarfati⁴.

This case raised further questions: Would hysterectomy, a common treatment for this condition, relieve the problem or not? What is the data for pain cure in patients who have had hysterectomy? Would promontofixation with mesh reduce or suppress the problem?

Sincerely

1. Weintraub A, Petros P, Editorial "Dedicated to Professor Heinrich Martius, pioneer in the ligamentous origin of chronic pelvic pain in the female" *Pelviperineology* 2017; 36: 66 <http://www.pelviperineology.org>.
2. Petros PE, *Pelviperineology* 2017; 36: 71-73 *Pelviperineology* 2017; 36: 66.
3. Sekiguchi Y, Inoue H, Liedl B et al. Is Chronic Pelvic Pain in the female surgically curable by uterosacral/cardinal ligament repair? *Pelviperineology* 2017; 36: 74-78.
4. Zarfati D, Petros P, The Bornstein Test- a local anaesthetic technique for testing uterosacral nerve plexus origins of chronic pelvic pain *Pelviperineology* 2017; 36: 89-91.
5. Wu Q, Luo L. Petros PEP Case report: Mechanical support of the posterior fornix relieved urgency and suburethral tenderness, *Pelviperineology* 2013; 32: 55-56.

JACQUES BECO

Department of Gynecology and Obstetrics, University Hospital of Liège, Liège, Belgium

Authors' reply

Curiosity, the engine of discovery

We thank Dr Beco for his observations which confirm key aspects of the Pelviperineology September 2017 issue on chronic pelvic pain (CPP). We commend this open-minded approach. Those who read the March 2018 issue on CPP will realize that Dr Beco, a significant authority on CPP caused by pudendal nerve injury, was sufficiently curious to test and evaluate a different, competing paradigm that CPP may be caused by pain derived from lax uterosacral ligaments. Dr Beco's investigations of the USL pain paradigm are the very essence of scientific enquiry. Scientific enquiry underlies the mission of Pelviperineology journal, its focus on discovery and the evidence which flows from discovery. Curiosity is the engine which drives the motivation, recruits the energy and the dedication needed for discovery, to test the discovery with scientific trials and ultimately, to test its clinical effectiveness with all the tools of the Cochrane Database of Systematic Reviews. However, Cochrane Reviews do not provide the whole picture which we call science. Without discovery, there is no Cochrane and without curiosity there is no discovery. Pelviperineology journal encourages all readers to challenge the concepts presented in the pages of the two pelvic pain issues for truth or falsity, using the classic deductive method recommended by Karl Popper¹, exactly as tested by Dr Beco.

With regard to Dr Beco's three final questions, we present our view en linea

Q1. *Would hysterectomy, a common treatment for this condition relieve the (pain) problem?*

Given the stated etiology of USL laxity, if during hysterectomy the surgeon tightened the USLs sufficiently to support the ligaments, the pain should improve. However, the same tightening of USLs without hysterectomy would be expected give equivalent cure.

Q2. *What is the data for pain cure in patients who have had hysterectomy?*

Hysterectomy involves severing the descending branch of the uterine artery, the main blood supply of the proximal USLs as they attach to the cervical ring. This explains the high incidence of pelvic floor dysfunction reported in hysterectomized older women, especially after the menopause.

Q3. *Would promontofixation with mesh reduce or suppress the problem (of pain)?*

The data from Claerhout et al.², showed no significant decrease in overall CPP at 3 months after surgery.

REFERENCES

1. Popper K R, *Theories, Falsifiability, The Logic of Scientific Discovery* (1980), Unwin, Hyman, London, 27-146.
2. Clairhout F et al, Medium-Term Anatomic and Functional Results of Laparoscopic Sacrocolpopexy Beyond the Learning Curve, *European Urology* 2009; 55: 1459-1468.

ADI WEINTRAUB and PETER PETROS
Editors Pelviperineology Pain Issues I&II